Environmental Management Review Western Area Power Administration

Final Report

U.S. EPA Region 8 Denver, Colorado November, 1998

ENVIRONMENTAL MANAGEMENT REVIEW FINAL REPORT

WESTERN AREA POWER ADMINISTRATION

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OVERVIEW:

The Environmental Protection Agency Region 8 Federal Facilities Pollution Prevention Program conducted an Environmental Management Review (EMR) at Western Area Power Administration (Western) from July to October, 1998. Two facilities were reviewed - the Headquarters Corporate Services Office (CSO) in Golden, Colorado, and the Rocky Mountain Regional Office (RMR) with associated warehouse and vehicle maintenance functions in Loveland, Colorado. Western selected two topics for the focus of the EMR: "Environmental Commitment" and "Formality of Environmental Programs."

The EMR Team was comprised of six members (names and titles are given in Appendix I). The EMR Team followed Phase 3 of the interagency <u>Generic Protocol for Conducting Environmental Audits of Federal Facilities</u>. Phase 3 is used for conducting environmental management assessments across an agency or facility.

The EMR was officially initiated with a confirmation letter from the EPA Federal Facilities Coordinator which outlined the EMR process and stated the commitments of both agencies. The EMR consisted of an information gathering and document review phase, an onsite visit of one day at CSO and two days at Loveland, an outbriefing given at both facilities focusing on "big picture" themes, and this written report submitted to Western within 60 days after the outbriefing. Within six months of receipt of the final report, Western will be asked to provide written feedback to EPA about the usefulness of the report and any followup which Western has undertaken or plans to undertake to implement recommendations in the report. Occasional informal telephone updates will be requested over the following year. This important feedback will help EPA improve its EMR process.

The written report serves multiple purposes: 1 - to document the EMR process; 2 - to highlight successful environmental management system (EMS) practices at these Western facilities; 3 - to identify areas where the present EMS does not conform to the selected sections of Phase 3 of the <u>Generic Protocol</u>; and 4 - to make recommendations for improvements to Western's EMS. The EMR Team was also given the charge by top Western management to keep costs in mind when making recommendations. We have tried to do this.

FACILITY BACKGROUND:

Western Area Power Administration was created in December, 1977, with the establishment of the Department of Energy. Western markets and delivers power produced at hydroelectric projects built by the Bureau of Reclamation, the U.S. Army Corps of Engineers, the International Boundary Water Commission, as well as some power from the Navajo coal-fired power plant at Page, Arizona. Today, Western has more than 600 customers in 15 Western states. Their customers include rural electric cooperatives, municipalities, public utility districts, Federal and state agencies, and irrigation districts. Western operates and maintains about 17,000 miles of transmission lines, in addition to more than 250 substations and other power facilities.

Western's Corporate Offices are in Golden, Colorado. It has four Regional Offices located in Loveland, Colorado, Billings, Montana, Phoenix, Arizona, and Sacramento, California, as well as the Colorado River Storage Project Customer Service Center in Salt Lake City, UT. Under each Regional Office there are District Offices, Maintenance Facilities, plus smaller staffed and unmanned facilities.

Western's budget comes from a variety of sources: funds appropriated by Congress, a revolving fund which uses revenues generated by power sales, and non-appropriated financing which includes net billing, bill crediting, Federal and non-Federal reimbursable funding and non-appropriation transfers. Non-appropriated funding accounts for more than half of the Agency's budget each year. Because the Agency has been experiencing a decrease in Congressionally appropriated funding, they make every effort to minimize overhead, cut costs, and respond quickly to customer needs. Deregulation of the utility industry is occurring in their service area and brings additional pressure to reduce expenses and provide good customer service.

From February, 1992, until the spring of 1998, Western underwent a major reorganization and downsizing called the "Transformation." As part of this restructuring, there was a shift away from top down agency management systems toward placing responsibility at the field level. Teamwork, cooperation and personal responsibility have been emphasized. The roles of the Corporate and Regional Office environmental programs were re-defined. Day-to-day control and operation was decentralized. Oversight of most environmental functions other than those under the National Environmental Policy Act (NEPA) was transferred to the Regional Managers. The Corporate Environmental Office has assumed a technical support function for the environmental compliance program and provides some of their services on a direct charge basis. For reports going to the Department of Energy, CSO retained a coordination and oversight role.

Today, Western's environmental compliance program is implemented primarily by the four Regional Offices. Because each Regional Office operates their environmental program autonomously, this EMR report focuses only on environmental management systems at RMR. The EMR Team saw indications that practices at RMR may not be representative of all Regions. We understand that the report will be shared with the other Regions so they can benchmark their systems against the EMR Team's evaluation of RMR.

Western's Administrator places strong emphasis on environmental compliance and communicates this expectation throughout the organization. Western's environmental policy was developed in 1994 and incorporated into the Operating Rules in their Strategic Plan. It states: "Western will conduct its business in an environmentally sound manner, efficiently and effectively complying with the letter, spirit and intent of applicable environmental statutes, regulations and standards. We believe in protecting and enhancing the environment and that these investments are sound business practices. Western will use effective planning to eliminate, lessen or mitigate the environmental impacts of its actions. Western's goal is to enhance the environment through cleanups, pollution prevention and waste minimization. Environmental protection is everyone's responsibility."

Western informally evaluates its environmental compliance program by looking at two measures - an impressive record of zero notices of violation, and cooperative working relationships with state and Federal regulators. An additional goal for the NEPA program is found in Western's 1994 Strategic Plan: "As the marketing agent for Federal power, we will participate in decision-making processes with natural resource agencies whose operating decisions significantly affect Federal power rates and repayment obligations. We measure our success in influencing natural resources agencies' decision-making processes by periodically reviewing the status and/or outcome of significant decisions by those agencies for adoption of our recommendations, that affected or could affect the power rates, repayment or customer service for each Region."

The managers and staff whom the EMR Team interviewed came across as a dedicated, experienced, and hardworking group. Many of them have been with Western for a significant number of years and have worked at different geographic locations and in different programs within Western. That some of Western's informal systems have worked well is due in part to the longevity, breadth and depth of service of the employees. The EMR Team also noted that with a workforce of longterm employees, training - in this case, environmental training - can have a good payback.

The environmental staff and managers at CSO and RMR are a very motivated, knowledgeable group. They are highly regarded by other Western employees and management for their technical expertise and responsiveness. Over the years, they have developed very good working relationships with other managers and staff in their respective offices. Recently, they joined with the other Regional Environmental Managers to form a Team.

The Environmental Managers' Team is beginning to address program implementation issues, improve communication across the Regions, and share successful practices to reduce duplication of effort. In the summer of 1998, they began pilot self-assessments of environmental management systems specific to their PCB management and cultural resources programs. The Team is using Phase 2 of the <u>Generic Protocol</u> to conduct the assessments. Phase 2 reviews the management systems by media program, such as air, wastewater, pollution prevention, hazardous waste, etc. The Team will evaluate these pilots and determine if the effort is worthwhile. If so, they will identify ways in which the assessments can be improved and do assessments for Western's other media programs.

As an agency within the Department of Energy (DOE), Western is covered by many DOE policies and procedures. In 1992, DOE conducted an agency-wide Line Program Environmental Management Audit of Western. Western evaluated the recommendations and has implemented some of them over the past six years. A copy of the audit report and Western's response, as well as subsequent implementation tracking reports, were shared with the EMR Team. Western has not received any feedback from DOE on their progress. Based on the EMR Team's document review and onsite visits, Western has made substantial improvements in its environmental programs since the early 1990's. We hope that the observations, conclusions and recommendations in this report can help institutionalize a culture of continuous improvement.

AUDIT TOOL USED FOR EMR:

The EMR Team used the <u>Generic Protocol-Phase 3</u> for the EMR. Phase 3 assesses environmental management systems across a facility or organization. Use of the <u>Generic Protocol</u> was a good fit at Western because the Environmental Managers' Team had already decided to employ Phase 1 as their compliance auditing tool. As mentioned above, they are using Phase 2 for the pilot Regional self-assessments of management systems within specific media programs. The environmental managers were already familiar with the <u>Generic Protocol</u> as a tool and understood its approach, although they had not used Phase 3 themselves.

SUCCESSFUL PRACTICES:

The EMR Team identified the following practices that enhance Western's environmental management systems and environmental programs. These successful practices do not necessarily fall within "Environmental Commitment" and "Formality of Environmental Programs."

SUCCESSFUL PRACTICES IN ENVIRONMENTAL COMPLIANCE:

- > Western's PCB Labeling Program is based upon DOE's best management practices, goes beyond EPA's labeling requirements, and is a leading practice in the industry. It includes labeling to identify equipment which has a PCB concentration of less than 50 ppm, based on sampling results or manufacturer's certification. Western also labels equipment that contains bushings and notes the actual or presumed PCB content of the oil or compound in each bushing. If no data on PCB content of the bushings are available, they manage the equipment as if it contained between 50 and 499 ppm PCB. An embossed metal self-adhesive strip is used to show the PCB content. This metal label eliminates problems with fading ink. Western's PCB tracking system is comprehensive and gives staff and regulators a clear picture of what is being done.
- > Western's PCB Management Program at RMR includes an aggressive effort, especially by Mark Hollenbeck at the Western Colorado Maintenance Office, to test the PCB content of bushings when equipment is taken out of service for maintenance and label the bushings. This makes optimal use of equipment downtime and, if the bushings are found to contain less than 50 ppm PCB's, reduces environmental cleanup and disposal costs.
- > At RMR, E. staff, safety staff, a management representative and a union representative conduct inspections of staffed facilities every year and unmanned facilities every 3-4 years. Phase I of the <u>Generic Protocol</u> is used. A centralized electronic database for inspection results is in place. Files of baseline facility audits are maintained and updated.
- > RMR has made operational changes at its Loveland facility to qualify for Conditionally Exempt Small Quantity Generator status, but they continue to manage hazardous waste under the requirements for a Small Quantity Generator. This conservative approach helps them stay in compliance, since a facility's status can change from month to month based on the amount of waste it generates.
- > RMR has eliminated unnecessary underground storage tanks at the Maintenance facility next to the Regional Office. There is only one underground storage tank left, and it has been upgraded to meet the new requirements which take effect in December, 1998.
- > To prevent discharges of hazardous waste directly to the environment, RMR has aggressively looked for and permanently sealed all the floor drains and sumps they have found.
- > A list of standard environmental specifications for Western's construction contracts was developed by CSO. An environmental specialist in RMR, with oversight from Western's Environmental Managers' Team, has assumed responsibility for keeping it up to date. Environmental staff evaluate each new construction contract and recommend the appropriate

SUCCESSFUL PRACTICES, continued:

specifications for that site from the list. Procurement is very supportive and includes the specifications recommended by the Environmental Program.

- > Design's Engineering Plans/GANT charts identify areas where endangered species or cultural resources require extra protection. Western's Geographical Information System has environmental layers.
- > In 1998, RMR began training construction inspectors to do field checks of mitigation measures in construction projects. RMR is also including the inspectors in environmental training for maintenance workers. This training will help the inspectors to do a thorough job and identify problems earlier. It supports Western's environmental policy "Environmental protection is everyone's responsibility."
- > Western uses MOSES (Mineral Oil Spill Evaluation System), a computer program to predict the fate of mineral oil spills from substation equipment and fuel oil spills from aboveground storage tanks. This program is also used to generate Spill Prevention, Control and Countermeasure Plans.

SUCCESSFUL PRACTICES IN MANAGEMENT AND COMMUNICATION:

- > When the Environmental Managers' Team meetings are held in the local area, Western's Administrator makes a point to participate at some point during the meeting. CSO's Chief Program Officer also attends the Environmental Managers' Team meetings when they are held locally.
- > At RMR, a Maintenance, Design and Construction Council meets quarterly to discuss long range planning, budget formulation, performance goals and benchmarking. The Environmental Manager is a member of this Council.
- > The RMR Environmental Manager participates in quarterly Maintenance managers' meetings.
- >Some RMR line managers in Construction and Maintenance demonstrate their environmental commitment through personal actions, such as attending the annual training for craftspeople, encouraging full attendance at the training, and working with Environmental Manager and staff to improve training.
- > <u>Closed Circuit</u> has consistently featured environmental news and information over the past four years. It is a very professional publication and is widely read within Western. <u>Closed Circuit</u> is also distributed to customers, retirees, DOE, and other outside organizations.

SUCCESSFUL PRACTICES, continued:

- > The Environmental Manager at RMR reports directly to the Regional Manager. He attends and reports at all RMR biweekly staff meetings.
- > At RMR, the Environmental Manager can approve and implement most new environmental procedures. Changes in regulatory requirements can be addressed quickly.
- > The Planning group in the Environmental Office has developed systems for tracking accomplishments and reviewing milestones related to environmental impact statements, environmental assessments, and categorical exclusions, as well as actions under the Endangered Species Act and cultural resources statutes. At CSO and RMR, these systems have been implemented and appear to be working effectively.
- > Communication between the environmental personnel at CSO and RMR is very good.
- > The Environmental Managers' Team holds monthly conference calls and has begun meeting quarterly to share information, plan, and address problems. The location and responsibility for planning the meeting rotates among the participants.
- > Western's Environmental Managers' Team initiated a pilot self-assessment program using the Federal interagency <u>Generic Protocol</u> Phase 2. Assistance and coordination was provided by CSO. Three Regions completed two program evaluations during the summer, 1998. The fourth Region will join future assessments.
- > The annual awareness training for craftspeople at RMR is realistic, job-related and interesting. It includes scenarios based upon field experiences. Attendance is expected and tracked by the Safety Office. Some line managers and field supervisors attend the training. Environmental training is also given to new crafts employees.
- > Monthly environmental activities reports prepared by CSO and RMR are informative. The RMR reports are widely distributed to managers throughout RMR. They are also sent to CSO and to other Regional Environmental Managers.
- > Discussions with land management agencies/landowners regarding Western's maintenance activities such as weed control, danger tree management, electromagnetic fields and erosion control, may identify E. issues which Western works to address.

SUCCESSFUL PRACTICES IN POLLUTION PREVENTION AND RECYCLING:

- > CSO and RMR Environmental personnel make excellent use of e-mail and computer databases to reduce paper use. Information requested by the EMR Team was provided as double-sided copies whenever possible.
- > CSO had a contractor develop manuals for integrated vegetation management and pest control as part of Western's efforts to improve its environmental management systems. The manuals promote pollution prevention by limiting up-front use of chemicals, highlighting non-chemical controls, and reducing the use of particularly toxic or hazardous pesticides. These manuals are being updated after Westernwide use for over one year. CSO gave a presentation about the integrated vegetation management approach at a meeting of other Federal agencies and has given a similar presentation for the utility industry.
- > Western has policies which restrict employees' ability to order toxic chemicals and hazardous materials or bring them onsite without prior approval.
- > Western promotes solar energy through installation of photovoltaic panels and solar hot water projects and incorporation of passive solar features at its own facilities.
- > Western educates its customers about alternative energy options, assists them in evaluating project feasibility, and helps them locate technical assistance to build projects.
- > Western's annual information collection and reporting on waste minimization and affirmative procurement will provide a good framework for satisfying the requirements of Executive Order 13101, "Greening the Government through Waste Prevention, Recycling and Federal Acquisition" (9/14/98).
- > The RMR vehicle maintenance facility is using re-refined motor oil. The Western Colorado vehicle maintenance facility in Montrose recycles antifreeze. CSO will order one or two new generation electric vehicles through GSA in the Year 2000 and install a recharging facility at their new building.
- > CSO's Administrative and Environmental Offices worked together to implement a program for used battery recycling and disposal. Both alkaline and nickel-cadmium batteries are included.
- > Western employees are encouraged to return video tapes to the video studio in Golden for recycling.

OBSERVATIONS AND CONCLUSIONS REACHED BY THE EMR TEAM

The tables on the following pages present the EMR Team's conclusions about how Western's environmental management systems at CSO and RMR did or did not meet the criteria in the <u>Generic Protocol</u> sections on "Environmental Commitment" and "Formality of Environmental Programs."

The EMR Team believes that CSO and RMR have a strong foundation for their environmental management systems. This foundation includes a clearly and broadly communicated commitment to compliance, a dedicated, knowledgeable and well-regarded environmental staff, and specific environmental projects that are well-defined and well-executed.

The EMR Team did see areas where improvements could be made. Western's management could do more to demonstrate their commitment to environmental protection on an ongoing basis. Western could recognize successful practices that move the Agency toward environmental excellence. The Agency could also improve the understanding of and attitude of personal responsibility for environmental protection by managers and staff.

The EMR Team did see a lack of formality in some areas. Given Western's size and desire to decentralize responsibility, this is not in and of itself a bad thing. Systems do not need to be inflexible or bureaucratic. However, informality can create problems if not supported by review or oversight.

Western top management's lack of emphasis on goals and action plans leads to a day-to-day compliance approach implemented by each Region without review. A day-to-day focus is likely to mean delays in completion of long term projects, and variable participation by and support across the organization. This could have business consequences such as extra cost from redundant activities, risk exposure due to things falling through the cracks, or customer impacts when inconsistent approaches across Regions lead to confusion or shopping among Regions for the "preferred" answer. Western's Environmental Managers' Team is beginning to look at these issues, but more rigor in their process and full participation by the Regions should be encouraged. As best management practices are identified, they should be implemented expeditiously across the Regions. As deficiencies are found, they should be corrected promptly.

Environmental performance is dependent more on individuals than on systems. With staff turnover, Western could lose continuity of expertise, capability and understanding. This could also affect communication and collaboration within the Region or across the Agency and affect Western's compliance program.

In summary, the compliance-based environmental management systems at CSO and RMR may not be sustainable. Staffing cuts or vacancies, changes in Western's internal operations, or deregulation and other external forces associated with a rapidly changing, highly competitive business environment, may reduce the environmental program's ability to support Western's needs.

ENVIRONMENTAL COMMITMENT: A. TOP MANAGEMENT SUPPORT

Sub- element	Insuff Info.	Elements Missing	Incompl Implem.	Fully Meets	Generic Protocol Criteria	Supporting Observations
1A1		X			1. Top management clearly communicates its commitment to E. protection through the issuance of formal statements and policies that explicitly state E. goals and expectations, with full compliance as a minimum goal.	Missing element: Top management clearly communicates a commitment to full environmental compliance, but has not explicitly stated environmental goals. Top management's expectations are 1) no notices of violation, and 2) cooperative working relationships with Federal and state environmental regulatory agencies.
1A2		×			2. Top management demonstrates its commitment to E. excellence through personal and managerial actions.	Missing element: Top management has not conveyed a commitment to environmental excellence in meetings with managers and staff.
1A3			CSO	RMR	3. Top management's commitment is demonstrated through required routine reporting regarding E. performance and the status of E. initiatives.	Incomplete implementation: The EMR Team observed that exception reporting, not routine reporting, on E. performance and initiatives was requested and reviewed by top management at CSO.
1A4				\boxtimes	4. Senior managers have a basic understanding of and appreciation for E. requirements relevant to the scope of the operations for which they are responsible.	Senior managers outside the E. program in both CSO and RMR have a basic understanding of and appreciation for the E. requirements for which they are responsible. At both CSO and RMR, there is an excellent awareness of the responsibilities and services of the E. group.
1A5			×		5. Top management encourages openness and is receptive to input on E. issues from all employees, as well as from the public at large.	Incomplete implementation: The EMR Team observed some openness, but not to the degree that would satisfy the EMR protocol. Emphasis on cost containment appears to limit Western's openness to agency and public input in NEPA process.

1A6			Scso	X RMR	6. Top management has created a culture of compliance, awareness, teamwork and line responsibility for E. management.	At CSO and RMR there is a culture of compliance, awareness and teamwork. Incomplete implementation: The EMR Team found greater line responsibility for environmental management at RMR than at CSO.
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Insufficient information:

Reviewer lacks sufficient data to rate element.

Elements missing: Incomplete implementation:

Structure for some or all of the sub-elements of the criteria are missing.

Structure for all of the sub-elements are in place, but implementation is incomplete, inconsistent or not sustained.

Structure for all of the sub-elements of the criteria are in place, and implementation is complete and sustained.

Fully meets:

ENVIRONMENTAL COMMITMENT: B. ENVIRONMENTAL POLICY

Sub- element	Insuff Info.	Elements Missing	Incompl. Implem.	Fully Meets	Generic Protocol Criteria	Supporting Observations
1B1				\boxtimes	1. A formal E. policy statement has been issued from a high enough level of authority within the organization to communicate its importance.	A formal E. policy which re-stated the environmental section of the Strategic Plan was signed and issued by Western's senior managers in 1996. The RMR also issued an E. policy when Stephen Faucett was Area Manager.
1B2					2. E. compliance is formally established as the minimum acceptable standard.	Western's Administrator strongly emphasizes compliance. All levels of employees (including contractors) understand and support compliance as the minimum acceptable standard.
1B3		×			3. The organization has established issue-specific policies for the major E. issues consistent with the scope of its operations.	Missing elements: Western has issue-specific management plans / manuals for major programs (NEPA, PCB's, stormwater, hazardous waste, waste minimization, cultural resources, etc). Some plans did not include policy statements. Some of the policy statements were out-of-date or incomplete.
1B4		\boxtimes			4. E. policies are widely distributed, easily accessible, and understood throughout the organization.	Missing elements: Managers are aware that a Westernwide E. policy exists. Outside the E. program, personnel at all levels within CSO and RMR were not familiar with the content, year it was issued or who signed it. Manuals containing policies/policy elements are not widely distributed. Employees would call E. office if they needed the policy.

Insufficient information: Reviewer lacks sufficient data to rate element.

Elements missing: Structure for some or all of the sub-elements of the criteria are missing.

Incomplete implementation: Structure for all of the sub-elements are in place, but implementation is incomplete, inconsistent or not sustained. Structure for all of the sub-elements of the criteria are in place, and implementation is complete and sustained.

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ENVIRONMENTAL COMMITMENT: C. LINE MANAGEMENT SUPPORT

Sub- element	Insuff Info.	Element Missing	Incompl. Implem.	Fully Meets	Generic Protocol Criteria	Supporting Observations
1C1		CSO	RMR		1.Individuals throughout the organization recognize the E. aspects of their job responsibilities, and take personal responsibility for and demonstrate a sense of ownership of E. protection.	Missing elements: Some CSO line managers did not fully recognize the extent of the environmental aspects of Western's responsibilities. E. protection is not in most CSO line managers' job descriptions/ performance plans, and some line managers could not state the exact role they played in E. protection. Western's latest environmental directive is in draft. Incomplete implementation: At RMR, general understanding of E. impacts of Western's operations varied. The RMR Environmental Protection Implementation Plan, which spelled out the E. duties of managers, was last updated in 1994. Some position descriptions / performance plans have E. responsibilities described.
1C2		×			2. Managers at all levels have formally stated and demonstrated their commitment to environmental excellence.	Missing element: Line managers at CSO and RMR support top management's commitment to E. compliance, not E. excellence.
1C3		CSO	RMR		3. Managers at all levels and in all functions whose activities may impact E. performance take responsibility and interest in limiting the E. impacts of their operations.	Missing elements: Perhaps because CSO does not directly implement most of Western's major E. programs, the EMR Team found more individuals who viewed the environmental program as the responsibility of the Environmental Office. They were less likely to consider environmental aspects in planning new initiatives, and less likely to see a role for themselves in limiting the E. impacts of their operations. Incomplete implementation: The EMR Team found greater line responsibility for environmental management at RMR. As mentioned in 1C1, because the understanding of E. impacts of Western's operations varied, the ability to act varied.

1C4	\boxtimes				4. Management and staff cooperate fully and openly with internal and external oversight groups.	Insufficient information: No interviews were conducted with external oversight organizations. * However, both CSO and RMR managers and E. staff felt positive about their relationships with external oversight groups. * Closed Circuit articles reported cooperative initiatives with Montana Department of Environmental Quality and Forest Service. * Management, staff at CSO and RMR cooperated fully with EMR. * Management and staff cooperate with the E. program when they conduct internal inspections.
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Insufficient information: Reviewer lacks sufficient data to rate element.

Elements missing: Structure for some or all of the sub-elements of the criteria are missing.

Incomplete implementation: Structure for all of the sub-elements are in place, but implementation is incomplete, inconsistent or not sustained. Structure for all of the sub-elements of the criteria are in place, and implementation is complete and sustained.

FORMALITY OF ENVIRONMENTAL PROGRAMS: A. REGULATORY TRACKING AND TRANSLATION

Sub- element	Insuff Info.	Elements Missing	Incompl. Implem.	Fully Meets	Generic Protocol Criteria	Supporting Observations
2A1		×			1. A formal system is in place to routinely track and interpret new and/or changes to Federal, state and local regulations and Federal agency policies for the organization.	Missing elements: There is no process which describes how regulatory tracking will be accomplished. Amount of effort depends on personal initiative and workload. There could be duplication across the Regions or gaps in coverage.
2A2					2. There is a process to ensure that guidance on new regulatory requirements is incorporated into organization or site-specific standard operating procedures as appropriate.	Missing elements: In the past, each Region has been responsible for incorporating new regulatory changes into its own E. procedures, and these procedures have not routinely been shared among the Regions. There was no outside review at RMR to ensure that procedures were being updated. Most written E. management plans and guides have not been updated since 1994/1995 due to the pace of change under Transformation. * A new approach being piloted by E. Managers' Team assigns responsibility for updating a specific Westernwide procedure to one Regional representative, followed by review, discussion, revisions and agreement by all Regions and CSO. This process would reduce duplication of effort if followed expeditiously, done on a continuing basis, and supported by each Region assuming leadership for some procedures where they have staff expertise. It would also help transfer best management practices across the Agency.
2A3				\boxtimes	3. Relevant regulatory information is routinely distributed to field organizations in a timely manner.	Regulatory information is distributed to the Regions from CSO, and from the RMR E. program to other RMR and field organizations via e-mail, meetings, and one-on-one assistance. People interviewed by the EMR Team generally felt they get regulatory information in a timely manner.

2A4					4. Field organizations are provided sufficient guidance for compliance with new regulations or policies in the form of guidance documents, sample plans and procedures.	Missing element: Each Region is responsible for formulating and distributing its own guidance. There is no system or review to ensure the quality or timeliness of the guidance, or that the guidance is passed down the chain. * Personnel interviewed generally felt that the guidance they receive is helpful.
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Insufficient information: Reviewer lacks sufficient data to rate element.

Elements missing: Structure for some or all of the sub-elements of the criteria are missing.

Incomplete implementation: Structure for all of the sub-elements are in place, but implementation is incomplete, inconsistent or not sustained. Structure for all of the sub-elements of the criteria are in place, and implementation is complete and sustained.

FORMALITY OF ENVIRONMENTAL PROGRAMS: **B. PROCEDURES**

Sub- element	Insuff Info.	Elements Missing	Incompl. Implem.	Fully Meets	Generic Protocol Criteria	Supporting Observations
2B1		X			1. The organization has a formal, controlled process for reviewing, creating, updating, and approving new procedures.	Missing elements: Western does not have a formal, controlled process for reviewing, creating, updating and approving E. procedures. Most E. plans /manuals have not been reviewed since 1994/95, apparently due to the pace of change during Transformation. E. managers are informal, but not official, participants in the review process for operational manuals such as PSMM. * Information is transmitted routinely and informally via e-mail, training, meetings.
2B2					2. Procedures and standards are issued from an organizational level with the authority to mandate implementation.	Missing element: The RMR E. Manager's position description does not specifically give him authority to issue procedures. * Western follows DOE and Western-specific procedures. Some procedures are issued through CSO after input and agreement by the Regions. * At RMR, E. procedures and standards are generally issued by the Regional E. Manager, per informal delegation from the Regional Manager. Procedures involving major policy shifts or addressing persistent E. problems are issued by the RMR Regional Manager.
2B3			×		3. Formal standards and procedures have been developed for the implementation of specific E. protection programs.	* Western has written plans that include procedures for numerous E. programs. The most recent are the Integrated Vegetation Management and Pest Control Guidance Manuals. E. procedures are also incorporated into the Power Systems Maintenance Manual and Purchase Power Reference Manual. Incomplete implementation: Incomplete implementation: Some procedures are out-of-date and do not reflect current practice.

2B4	×		4. There are procedures to ensure that any activities that might impact the environment are reviewed for E. protection considerations.	Missing elements: Western does not have a system to take a comprehensive look at activities to identify those which should involve E. reps early in decision-making. Activities such as equipment purchases, IMPAC cards, etc, can have environmental impacts that are not presently being considered early enough to take protective or preventative measures.
2B5	×		5. Procedures are part of a formal, auditable document control system designed to ensure that personnel have ready access to current versions of procedures containing E. requirements.	Missing elements: Western does not have a formal, auditable document control system. Some procedures were not dated when issued. * At RMR, when E. personnel conduct Annual Facility Reviews of manned facilities, they spot check the program documentation in certain high emphasis areas to make sure it is up-to-date.
2B6	×		6. The organization has implemented a system to periodically review and update E. procedures.	Missing elements: E. procedures are reviewed on an adhoc basis through self-assessments and as regulations or policies change. New and revised E. procedures are communicated in a timely manner via e-mail, training and meetings. However, the EMR Team did not see a system to periodically review and update E. procedures.

Insufficient information: Reviewer lacks sufficient data to rate element.

Elements missing: Structure for some or all of the sub-elements of the criteria are missing.

Incomplete implementation:

Fully meets:

Structure for all of the sub-elements are in place, but implementation is incomplete, inconsistent or not sustained.

Structure for all of the sub-elements of the criteria are in place, and implementation is complete and sustained.

FORMALITY OF ENVIRONMENTAL PROGRAMS: C. ROUTINE FACILITY INSPECTIONS

Sub- element	Insuff Info.	Elements Missing	Incompl. Implem.	Fully Meets	Generic Protocol Criteria	Supporting Observations
2C1		X			1. The organization has a program for routine site equipment inspections and compliance checks, including appropriate documentation.	Missing element: The facility inspection program does not include a programmatic review of the CSO and RMR E. functions. The self-assessment pilot starts this but needs more rigor.
2C2				\boxtimes	2. The organization has a formal system for follow-up of exceptions noted in inspections, which is supported by management review.	* Exceptions found during RMR compliance inspections are reported to line and top managers. Exceptions found during the Mitigation Monitoring Program are reported to the appropriate office or agency. * Compliance problems which are easily fixed are corrected on the spot. For more difficult findings, the E .staff may return in a week or two to help the facility correct the problem. The facility has 30 days to fix findings related to Best Management Practices. * Findings from inspections are used to improve and target E. training.

Insufficient information:

Reviewer lacks sufficient data to rate element.

Elements missing:

Incomplete implementation: Fully meets:

Structure for some or all of the sub-elements of the criteria are missing.

Structure for all of the sub-elements are in place, but implementation is incomplete, inconsistent or not sustained.

Structure for all of the sub-elements of the criteria are in place, and implementation is complete and sustained.

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FORMALITY OF ENVIRONMENTAL PROGRAMS: D. RECORDKEEPING AND REPORTING

Sub- element	Insuff Info.	Elements Missing	Incompl. Implem.	Fully Meets	Generic Protocol Criteria	Supporting Observations
2D1				×	Systems are in place for the appropriate documentation and recordkeeping of E. performance.	* NEPA documentation and recordkeeping are structured and include a Mitigation Implementation and Monitoring System. * CSO Planning staff track information on the status of actions under environmental impact statements and assessments. RMR Planning staff track EISs, Assessments, and categorical exclusions. * Other formal recordkeeping systems include the RMR Facility Review system which includes both facility evaluation documents and inspection reports, the PCB tracking database, hazardous waste manifest records, used oil receipts and records, and copies of annual waste minimization and affirmative procurement reports.
2D2		X			The organization has a document control system and record retention policy.	Missing element: Western does not have a document control system for E. manuals and procedures. * Western has a formal, written records retention policy and procedures defined in the Western Records Management Manual. In addition to those requirements, there are specific E. program recordkeeping rules. As a special precaution to minimize environmental liability, RMR's informal policy is to keep all records on PCB's and hazardous waste disposal as well as all EISs and Environmental Assessments, indefinitely.
2D3		×			3. There are systems in place to ensure that E. reports required by Federal and state regulations and Federal agency policy are routinely prepared and submitted on a timely basis.	Missing element: The EMR Team did not find evidence of a review to assure that required E. reports are prepared and sent on a timely basis. The current system depends on attention to detail of E. program personnel. RMR relies upon reminders from DOE HQ and the states for some reporting. If those reminders were not sent, the EMR Team felt that the reporting could be overlooked due to the heavy workload.

2D4			4. E. status reports with the appropriate level of detail are routinely prepared for internal management purposes and for reporting E. concerns to higher levels of management in a timely manner.	* Top CSO management receives information on pending high profile E. problems via the Weekly Administrator's Activity Report. Top CSO management also reviews the Annual Site Environmental Report on program accomplishments and initiatives. * For the past two years, vulnerabilities in Western's E. program have been raised by the CSO E. Office as a Federal Managers' Financial Integrity Act weakness. * A monthly E. report for the Chief Program Officer is compiled by the CSO E Office from monthly activity reports sent to CSO by the Regional E. Managers. * RMR's monthly activity report includes project status, accomplishments, issues. It is distributed throughout RMR management including field offices and sent to other Regional E. Managers and CSO. * At RMR, findings from the Annual Facility Reviews go to appropriate line managers, supervisors, and upper managers.
2D5			5. There are formal mechanisms to investigate, report, correct, track, and monitor trends in E. problems and "incidents." The types and magnitudes of the problems that should be reported are well-defined.	Missing element: Information on root causes or trends is not formally tracked. For minor events, the RMR E. Manager does an informal root cause analysis using information from staffed facility inspections. Information is used to improve annual training for craftspeople where appropriate. * There are formal mechanisms to investigate, report, and correct E. problems and incidents.

Insufficient information: Reviewer lacks sufficient data to rate element.

Elements missing: Structure for some or all of the sub-elements of the criteria are missing.

Incomplete implementation: Structure for all of the sub-elements are in place, but implementation is incomplete, inconsistent or not sustained. Structure for all of the sub-elements of the criteria are in place, and implementation is complete and sustained.

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RECOMMENDATIONS:

The EMR Team has not provided specific recommendations regarding missing or incomplete elements from the tables above. For the most part, the actions which should be taken are self-evident. If additional suggestions would be helpful, Western is encouraged to contact the EMR Team Leader.

Instead, the ideas provided below outline a strategic plan for strengthening Western's environmental management systems. Under each number, the ideas are arranged in a relative timeline. Because the EMR Team only visited CSO and RMR, some of the recommendations are specific to them. However, if they apply to other Regions, the actions could be taken across the Agency. The EMR Team also included Westernwide suggestions where they felt it was appropriate.

SUGGESTED ACTIONS	POTENTIAL BENEFITS
Identify key opportunities for improvement (Westernwide)	Identifies areas of most significant exposure and opportunity.
a. Fast track and tighten-up self assessments by:	Ensures that resources are spent on most
 establishing goals and expectations for participation and completion, 	important activities.
ii) ensuring participation by all Regions, iii) ensuring funds/time are available to meet goals,	Enhances cross-region cooperation, information sharing.
iv) establishing some rigor / independence in process	Ğ
(e.g. participation by other functions, cross-region review, external resources)	Minimizes redundancy, cost.
 v) implement obvious recommendations as they come up rather than waiting to complete the assessments. 	Communicates Management's commitment to E. improvement.
b. Look at all business processes to identify those with potential E. impacts.	Covers E. aspects of more of Western's business activities.
i) identify business activities ii) identify which activities have potential E. impacts iii) define and communicate criteria for triggering E. input / review	Avoids costs of possible delays, need for rework
iv) describe oversight process to make sure there is timely consideration of E. in business decisions v) evaluate business processes periodically to discover opportunities for process improvements and streamlining.	Expands understanding of relationship between E. protection and business.

SUGGESTED ACTIONS, continued	POTENTIAL BENEFITS
 2) Expand managers' E. knowledge and ownership at CSO and RMR: a) identify key players for Western's business activities with E. impacts (see 1.b.2 above). b) decide what E. information these players need to make sound decisions. c) provide practical task oriented, experience-based training / work tools to support sound decision-making, timely inclusion of E. considerations. d) evaluate and improve training / tools with feedback from participants; continue to incorporate new Western case studies. 	Enables and empowers key players to make sound E. decisions or know when to call for professional E. assistance. Provides practical, task-oriented, experience-based training (rather than generic awareness training.)
3. Develop goals to lead the RMR (or Westernwide) E. program - go beyond no NOV's. a) tie the goals to the needs and priorities of the E. program and the business processes identified under 1.b.ii. b) clearly communicate the goals across the organization. c. provide funds / time to meet the goals. d. measure and communicate success in achieving goals.	E. priorities are clearly understood and supported by management. Ensures resources are spent on most important activities.
 4. Evaluate the compliance assurance program (Westernwide). a) determine how each Region currently ensures compliance (e.g., auditing, self-inspections, corrective action planning and tracking, etc.) b) determine whether these verification processes are sufficient (e.g. do the personnel doing the evaluation have the proper training, are they thorough, are they sufficiently independent?) c) determine whether these processes are effective in ensuring compliance (e.g., do they account for changes in policy, regulations, do they ensure timely reporting and correction of findings, etc) d) determine if other actions should be taken to improve compliance assurance 	Minimizes risk, costs of non-compliance. Minimizes customer confusion, answer shopping.

SUGGESTED ACTIONS, continued	POTENTIAL BENEFITS
 5. Improve E. document management within RMR and possibly other Regions a) expand effort to identify key documents and establish "owners" to manage revisions, distribution, maintenance, etc. b) establish process to periodically review and revise E. documents. c) implement document controls (e.g., issue dates, statement on whether revision replaces or modifies previous version, field checks). 	Helps maintain continuity. Ensures consistency when appropriate. Minimizes possibility of things "falling through the cracks." Assists field personnel to identify and work from most current policies and procedures.
 6. Implement periodic review of environmental management systems. a) consider having EMR at other Regions. b) expand management involvement beyond status review to more strategic look at E. contributions to business. c) identify opportunities to improve systems, enhance E. protection, reduce costs and manage potential liabilities. 	Provides outside review to complement self-assessments. Identifies opportunities common to more than one Region. Supports alignment of E. with business objectives. Maintains flexibility of E. program to adjust to changes in Western's business activities

FOLLOW-UP TO EMR:

Within six months of delivery of the final EMR report, Western has agreed to provide written feedback to EPA about the usefulness of the report and any followup which Western has undertaken or plans to undertake to improve their environmental management systems. The EPA Federal Facilities Coordinator will talk with the designated Western EMR contacts from time to time over the following year to informally follow changes. This important feedback will help EPA to improve its EMR process.

IN CLOSING:

In closing, the EMR Team is very appreciative of the cooperation and support which they received from managers and staff throughout CSO and RMR. They especially wish to highlight the time and effort which the Environmental Offices provided to make this initiative go smoothly. As the EMR contacts at their respective offices, Ken Mathias and Jim Hartman were very responsive. They provided documentation on Western's programs, scheduled interviews, and provided a real time quality assurance check on the Team's observations during the onsite visits. Without this assistance, the EMR Team would not have accomplished its work in the limited time available.

APPENDIX 1

APPENDIX 1: EMR Team

Team Leader

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APPENDIX 2

APPENDIX 2: DOCUMENTS REVIEWED

Battelle Memorial Institute Pacific Northwest National Laboratory. <u>Western's Environmental Risk Communication, Assessment and Prioritization Program, Version 1.0 User's Guide.</u> November, 1995.

Blythe, Tim. "Labeling Oil Filled Equipment for PCB Content." Memorandum with attachment dated February 16, 1993.

Electric Power Research Institute. "MOSES-MP: Computer software for predicting the fate of mineral oil and fuel oil spills from aboveground equipment and tanks." No date.

Jim Hartman. "Environmental Planning and Compliance Activity Reports" for Rocky Mountain Region, Western Area Power Administration.. Memoranda to Joel Bladow for the months April, May and June, 1998.

Jim Hartman. Examples of agendas from Western Environmental Managers' Team meetings and conference calls. December 2, 1996, July 22-23, 1998, October 20-22, 1998.

Jim Hartman. Two samples of minutes from RMR Managers' Staff Meetings where environmental issues were discussed. June 24, 1998 and July 14, 1998.

Gene Iley. "Examples of Construction Projects Where Environmental Office was Contacted for Review." December 23, 1997, April 23, 1998, May 20, 1998.

Van Dyke, Nancy L. "Responsible Environmental Management and Pesticide Use: Western Area Power's Vegetation Management and Pest Control Guidance." Paper presented at National Association of Environmental Professionals meeting in San Diego, CA. June, 1998.

U.S. Department of Energy. Affirmative Procurement Reporting System (APRS) 1997 User's Manual. October 2, 1997.

U.S. Department of Energy Directives at http://www.explorer.doe.gov:1776/htmls/directives.html

U.S. Department of Energy Office of Environmental Audit. <u>Line Program Environmental</u> Management Audit - Western Area Power Administration. March, 1992.

Western Area Power Administration. "Administrator's Weekly Report." August 14, 1998.

Western Area Power Administration. Annual Reports for FY 1994 and FY 1997. no dates.

Western Area Power Administration. <u>Annual Site Environmental Reports</u> for Calendar Years 1993, 1994, 1995, 1996, 1997.

Western Area Power Administration. Closed Circuit issues between 1995 and 1998.

Western Area Power Administration. Energy Services Bulletin issues between 1996 and 1998.

Western Area Power Administration. "Environmental Compliance Related to the Operation and Maintenance of Power Facilities." Order 5400.2A. March 14, 1994.

Western Area Power Administration. "Environmental Considerations in the Planning, Design, Construction, and Maintenance of Power Facilities and Activities." Order 5400.1A. November 10, 1994.

Western Area Power Administration. "Environmental Considerations in the Planning, Design, Construction, and Maintenance of Power Facilities and Activities." Draft Order 5400.3. No date.

Western Area Power Administration. "Environmental Guide Paragraphs for Construction Specifications: Subdivision 1.4 - Environmental Quality Protection." Draft dated July 31, 1998.

Western Area Power Administration. Examples of employee input and actions demonstrating commitment to environmental protection. Compiled by CSO and RMR in August, 1998.

Western Area Power Administration. Examples of Western's response to public input on environmental issues. Compiled by CSO and RMR. Various dates.

Western Area Power Administration. "General Power Contract Provisions." July 10, 1998

Western Area Power Administration. General Requirements for Interconnection. April 9, 1993.

Western Area Power Administration. <u>Line Program Environmental Management Remedial</u> Action Plan. July, 1992.

Western Area Power Administration. Power Marketing: How We Do Business. August, 1993.

Western Area Power Administration. "Power System Incident Reporting." Order 5500.1G. January 20, 1998.

Western Area Power Administration. <u>Power System Maintenance Manual</u> selected chapters. Dates vary.

Western Area Power Administration. Power System Safety Manual. March, 1998.

Western Area Power Administration. <u>Self-Assessment Pilot Project: Cultural Resources Program Self Assessment</u>. August 14, 1998.

Western Area Power Administration. Strategic Plan: On Our Journey. Fall, 1996?

Western Area Power Administration. <u>Western Records Management Manual</u> Appendix A. March 28, 1995.

Western Area Power Administration. "1997 Annual Report on Waste Generation and Waste Minimization Progress as Required by DOE Order 5400.1." Data input/worksheet summary also attached. April 1, 1998.

Western Area Power Administration Corporate Services Office - Chief Program Officer. "A Guide to the A3400 Action Plan." February, 1998.

Western Area Power Administration Corporate Services Office - Chief Program Officer. "Environment: FY 97 Accomplishments and Goals and Objectives for FY 98."

Western Area Power Administration Corporate Services Office. Examples of position descriptions and performance plans for managers. Various dates.

Western Area Power Administration Corporate Services Office - Environment. "Pre-Site Visit Facility Questionnaire Response." Response provided with attachments on July 29, 1998.

Western Area Power Administration Corporate Services Office - Lands. Policy Notebook.

Western Area Power Administration Customer Service Office - Environment. <u>Environmental Compliance Programs, Projects and Workload Issues</u>. Report prepared for senior management on Western's Environmental Programs, April 4, 1994.

Western Area Power Administration Customer Service Office - Environment. "Monthly Activity Reports." March, June and July, 1998

Western Area Power Administration Division of Environment. <u>Waste Minimization Pollution</u> <u>Prevention Awareness Plan.</u> December, 1995

Western Area Power Administration Environmental Programs. <u>PCB Self Assessment Pilot Project</u>. Prepared for the Environmental Managers' Meeting of July 22/23, 1998.

Western Area Power Administration Loveland Area Office. "Annual Facility Environmental Inspections." Reports for Nebraska facilities from 1995, 1996, 1997.

Western Area Power Administration Loveland Area Office. Correspondence on underground

injection control Class V injection well inventory. Various dates between 1989 and 1993.

Western Area Power Administration Loveland Area Office. <u>Environmental Protection</u> <u>Implementation Plan November 9, 1995 - November 9, 1996</u>. November 9, 1994.

Western Area Power Administration Loveland Area Office. <u>Field Guide to PCB Management</u>, <u>Second Edition</u>. Revised January, 1995.

Western Area Power Administration Loveland Area Office. <u>Hazardous Waste Management Plan</u>. April 15, 1992.

Western Area Power Administration Loveland Area Office. "Mitigation Monitoring Program with 1994 Environmental Mitigation Surveys/Monitoring for LAO." No date.

Western Area Power Administration Rocky Mountain Region. Agendas/sample training materials for annual environmental training provided to RMR staff/management in 1997 and 1998.

Western Area Power Administration Rocky Mountain Region. Agendas/meeting notes from quarterly Maintenance Division Director's meetings. May 12-15, 1998, August 11, 1998

Western Area Power Administration Rocky Mountain Region. Audit forms/checklists used when conducting annual facility, maintenance office and substation audits. No date.

Western Area Power Administration Rocky Mountain Region. "Calendar Years 1996 and 1997 PCB Annual Document Log and Records." April 17, 1998 and June 26, 1998.

Western Area Power Administration Rocky Mountain Region. "Categorical Exclusion Database" printout. August 28, 1998.

Western Area Power Administration Rocky Mountain Region. "Maintenance, Design and Construction (RMR MDCC) Charter." No date.

Western Area Power Administration Rocky Mountain Region. Monthly Substation Inspection checklist. No date.

Western Area Power Administration Rocky Mountain Region. Position descriptions and performance plans for managers and staff. Various dates.

Western Area Power Administration Rocky Mountain Region. "Pre-Site Visit Facility Questionnaire." Response provided with attachments on July 30, 1998.

Western Area Power Administration Rocky Mountain Region. "Tier Two Emergency and Hazardous Chemical Inventories" for RMR's Colorado facilities. February 13 and 20, 1998.

Woodward-Clyde Consultants. <u>Storm Water Pollution Prevention Guidance Manual</u>. Prepared for Western Area Power Administration. February, 1994.